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ABSTRACT

The conceptualization of working-class Latino students' households as being rich in funds of knowledge has engendered transformative consequences for teachers, parents, students, and researchers. The qualitative study of their own students' households by teachers is a viable method for bridging the gap between school and community. An assumption of the project described is that educational institutions do not view working-class minority students as emerging from households rich in social and intellectual resources, but instead emphasize what these students lack in terms of the forms of language and knowledge sanctioned by the schools, leading to lowered academic expectations and inaccurate portrayals of these children and their families. In the research, teachers enter the households of two to three of their students as ethnographers, as learners of the everyday life contexts of their students' lives and participate in study groups that offer a forum for the collective analysis of the household findings. Teachers then form curriculum units that tap in to the household funds of knowledge. Parents are drawn into the process by the validation of household knowledge as worthy of pedagogical notice and new avenues of communication between school and home have been constructed in a way that fosters "confianza," or mutual trust. (Contains 21 references.) (Author/JL)

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EDUCATIONAL PRACTICE REPORT 6

ED 360 825

TEACHER RESEARCH ON FUNDS OF KNOWLEDGE: LEARNING FROM HOUSEHOLDS

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Teacher Research on Funds of Knowledge: Learning from Households

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Overview

The conceptualization of working-class Latino students' households as being rich in funds of knowledge has engendered transformative consequences for teachers, parents, students, and researchers. The qualitative study of their own students' households by teachers has unfolded as a viable method for bridging the gap between school and community. Teachers enter the households of two to three of their students as ethnographers, that is, as learners of the everyday lived contexts of their students' lives. These are not home visits in the usual sense, as teachers do not attempt to teach the family or to visit for disciplinary reasons. The focus of the home visit is to gather details about the accumulated knowledge base that each household assembles in order to ensure its own subsistence. Teachers also participate in study groups that offer a forum for the collective analysis of the household findings. Based on their experiences in the households and the study groups, teachers form curriculum units that tap into the household funds of knowledge. Parents have been drawn into the process by the validation of household knowledge as worthy of pedagogical notice. New avenues of communication between school and home have been constructed in a way which fosters *confianza*, or mutual trust.

"Home visits are not new. I was doing home visits 20 years ago in the Model Cities program," asserted the principal of one elementary school. Her point is well taken. The notion of home visits is neither novel nor unusual. Teachers may opt to visit the home of a student to discuss a particular problem, such as a student's disruptive behavior in the classroom, or to pinpoint difficulties with a particular subject matter. The teacher may simply introduce himself or herself to parents and elicit their cooperation. Some school programs require home visits for the teachers to mentor parents on the teaching of reading or math to their children, to provide suggestions on how to help the students with their homework, or to distribute books and supplies.

In this report, however, we describe a very different type of household visit by teachers. These are research visits for the express purpose of identifying and documenting knowledge that exists in students' homes. In contrast to other visits, these visits are part of a "systematic, intentional inquiry by teachers"—as Lytle and Cochran-Smith (1990, p. 84) define teacher research—about their students' household life. We are convinced that these research visits, in conjunction with collaborative ethnographic reflection, can engender pivotal and transformative shifts in teachers and in relations between households and schools and between parents and teachers (see González & Amanti, 1992; Moll, Amanti, Neff, & González, 1992).

Instead of presenting, as is common, the university-based researchers' interpretations of ongoing work, we have chosen to emphasize the participating teachers' insights on this project: what they consider relevant and important to communicate to others, especially to other teachers, as a result of their own inquiry. Lytle and Cochran-Smith (1990) have noted that "conspicuous by their absence from the literature of research on teaching are the voices of teachers themselves—the questions and problems teachers pose, the frameworks they use to interpret and improve their practice, and the ways teachers themselves define and understand their work lives" (p. 83). In order to make explicit the transformative nature of the household visits, we have therefore opted for a multivocal discourse that attempts to demystify the traditional authority of university-based researchers. As our research evolved, the authentic collaboration between teacher/researchers and university-based researchers fashioned an alteration in the conventionally asymmetrical exchange between university and schools. In brief, we attempt in this report to provide insights that corroborate the assertion that elementary school teachers are every bit as capable of theoretical reflection as university professors (Savage, 1988).

In what follows, we first present an overview of the research project, highlighting what we refer to as "funds of knowledge," a key theoretical concept in our work. This overview is intended to provide the general context of the research and the goals of the investigation. A critical assumption in our work is that educational institutions do not view working-class minority students as emerging from households rich in social and intellectual

resources. Rather than focusing on the knowledge these students bring to school and using it as a foundation for learning, schools have emphasized what these students lack in terms of the forms of language and knowledge sanctioned by the schools. This emphasis on so-called disadvantages has provided justification for lowered academic expectations and inaccurate portrayals of these children and their families.

Following the overview, we introduce the teacher/researchers in the project and describe their participation in the study, including selected aspects of their research training. We follow with a summary of the teachers' insights, gained from their research efforts, regarding three key domains of change: (1) the development of teachers as qualitative researchers, (2) the formation of new relationships between teachers and families, and (3) the re-definition of local households as repositories of important social and intellectual resources for teaching.

We conclude with a discussion of the minimal conditions necessary to conduct this work in other settings. As we will emphasize, we offer no recipes for implementation or replication elsewhere. Instead, we suggest the importance of developing at each site a "community of learners," where teachers are offered a format to think, reflect, and analyze with others and produce the knowledge necessary to transform their teaching in positive ways. In describing such communities of learners, Ayers (1992) remarks that "people learn best when they are actively exploring, thinking, asking their own questions, and constructing knowledge through discovery" (p. 20). As teachers actively co-construct the theory and practice behind research-based household visits, the challenging sense that knowledge is open-ended, active, and continuous can create new and meaningful environments of learning for all concerned.

The Research Project

A central goal of our project is to draw upon the knowledge and other resources found in local households to develop, transform, and enrich classroom practice. We can summarize our three main project components as follows:

1) **Community:** an ethnographic study of the origin, use, and distribution of funds of knowledge among households in a predominantly Mexican working-class community of Tucson, Arizona;

2) **After-school teacher "labs":** study groups created to enhance the collaboration between teacher/researchers and university-based researchers, to discuss research findings, and to plan, develop, and support innovations in instruction;

3) **Schools:** classroom studies to examine existing methods of instruction and to implement innovations based on the household study of funds of knowledge and conceptualized in the after-school labs.

These three components allow us to conduct research simultaneously in several related areas and to shift our primary unit of study from, for example, classrooms to households, or to shift from a focus on teachers to a focus on students, without losing sight of the interconnectedness of the settings or the activities we are analyzing.

In terms of the community component, our emphasis has been on understanding local households historically. This approach involves understanding the sociopolitical and economic context of the households and analyzing their social history (see, e.g., Vélez-Ibáñez, 1988). This history includes the families' origins and development and, most prominently for our purposes, their labor history, which reveals some of the accumulated funds of knowledge of the households. Funds of knowledge refers to those historically developed and accumulated strategies (e.g., skills, abilities, ideas, practices) or bodies of knowledge that are essential to a household's functioning and well-being (for details, see Greenberg, 1989; Vélez-Ibáñez & Greenberg, 1992). A key finding from our research is that these funds of knowledge are abundant and diverse and may include information about, for example, farming and animal husbandry (associated with households' rural origins), construction and building (related to urban occupations), and many other matters, such as trade, business, and finance on both sides of the U.S.-Mexican border.

We are particularly interested in how families develop social networks that interconnect them with their environments—most importantly with other households—and how these social relationships facilitate the development and exchange of resources, including funds of knowledge (see, e.g., Moll & Greenberg, 1990; Vélez-Ibáñez & Greenberg, 1992). A key characteristic of these exchanges is their reciprocity. As Vélez-Ibáñez (1988) has observed, reciprocity represents an "attempt to establish a social relationship on an enduring basis. Whether symmetrical or asymmetrical, the exchange expresses and symbolizes human social interdependence" (p. 142). That is, reciprocal practices establish serious obligations based on the assumption of *confianza* (mutual trust), which is re-established or confirmed with each exchange and leads to the development of long-term relationships. Each exchange with kinsmen, friends, neighbors, or teachers (as in our case) entails not only many practical activities (from home and automobile repair to animal husbandry and music), but constantly provides contexts in which learning can occur: contexts, for example, where children have ample opportunities to participate in activities with people they trust (Moll & Greenberg, 1990).

Parameters of Teacher Participation

Another key feature of the project is the close collaboration between anthropologists and educators, especially classroom teachers. We have been experimenting with after-school teacher study groups, or "labs," as contexts for informing, assisting, and supporting the teachers' work: contexts, in other words, for the exchange of funds of knowledge between teacher/researchers and university-based researchers (for details, see Moll et al., 1990).

These after-school settings function as mediating structures in forming strategic connections between the household fieldwork and classroom practice. After-school lab meeting locales are rotated among the four elementary schools in the study and the university. Participants include the four teachers involved in the study; a teacher/researcher on leave of absence from the school district to pursue graduate work in anthropology; university researchers in education, anthropology, and math education; and graduate students in education. Meetings take place every two weeks, although they are sometimes preempted by school activities. Within the study-group framework, a combination of ethnographic field methods are analyzed, and participant-observation, open-ended interviewing strategies, life histories, and case studies are incorporated into the joint inquiry of household and community ethnography. In this way, the ethnographic experience has become a collaborative endeavor, not based on a lone researcher venturing out into the field, but on a multi-authored discourse constructed out of the participant/fieldworker/teacher/anthropologist experiences. Mentoring functions switch back and forth as researchers and teachers each manipulate their own sphere of expertise. Just as teachers entered the households as learners, so the researchers entered the teacher study groups as learners. As previously noted, reciprocity as a theoretical construct has formed the basis for the exchange between households and schools, and this construct has been paralleled in the relationships between teachers and researchers. Within this interactive and constitutive process, the role of the teacher is defined in non-traditional ways. The redefined relationship of teacher and researcher is that of colleagues mutually engaged in refining methodology, interpretation, and practice (see González & Amanti, 1992). In this way, "curriculum, research and learning become matters of authorship rather than authority" (Woodward, 1985, p. 776).

As is often the case with anthropological research, however, certain insights and conclusions came in a post hoc fashion, and the evolution of the teacher study groups is a case in point. The original prototype of the teacher labs consisted of the discussion of household visits and data. However, the actual fieldwork was not conducted by teachers, but by anthropologists. Ironically, although a participatory model of learning was advocated in work

with children, the original teacher labs relied on a transmission model; information was presented by anthropologists, and teachers received it without actively involving themselves in the production of this knowledge (see Moll et al., 1990). It became apparent that, although worthwhile information about the forms and functions of the households was being transmitted to the teachers through the study groups, true ownership of the data was not taking place. Teachers were disconnected from the actual context of the households. The admonition suggested by Spindler and Spindler (1990, p. 108), that "learning about human cultures must occur empathetically and emotionally as well as conceptually or cognitively," began to take on transcendent importance. The connection of the household and teacher could not come about through a field researcher as intermediary; the bond had to be formed interpersonally, evocatively, and reciprocally.

Interestingly, on the few occasions when teachers did accompany field researchers into the homes, it was noticed that the teachers had a ready access to the households that the anthropologists had to labor to achieve. As the child's teacher, they were given entree into the households in a position of respect and honor. The families evinced no suspicion of motives nor mistrust of how the information gathered was to be used—circumstances that had at times plagued the anthropologists. The common bond of concern for the child overrode most constraints. Additionally, it was found that once the teachers were involved in a dialogue with the families, they were effortlessly asking much better learning questions about the child's activities. It became apparent that an ethnographic method of approaching the households could be used by teachers to get to know the households. Thus, the stage was set for the entrance of teachers as ethnographers into the households of their students.

The Teachers

Four teachers were recruited to work as teacher-researchers. Recruitment of teachers was carried out through personal and previous research contacts. The number of teachers was purposely limited in order to maintain a small, tightly knit group that would remain together for a prolonged amount of time. Initially, the four teachers represented two schools, but by the beginning of the second year, two had moved to new schools. All of the schools, however, are located within working-class, predominantly Mexican neighborhoods. Two Mexican and two Anglo teachers, all fluent in Spanish, participate in the study.

Anna Rivera (AR) has been a bilingual classroom teacher for 15 years. She is presently a first grade teacher in a bilingual classroom. She has a doctorate in elementary education and has taught at all levels, from pre-kindergarten through university graduate courses.

Patricia Rendón (PR) has been teaching since 1969. She has a background in languages and received her undergraduate degree in Ohio, where she taught for 4½ years. She then moved to Medellín, Colombia, and later to Bogotá. She taught in a variety of K-8 bilingual settings in Colombia for 9 years. Since moving to Arizona, she has taught in both monolingual and bilingual classrooms. She received her M.A. in 1991 and is presently a fifth grade teacher in a bilingual classroom.

Martha Floyd-Tenery (MFT) has been a teacher in various settings for 9 years. She has worked as an elementary classroom teacher, a bilingual resource teacher, an ESL teacher for Spanish speakers, a teaching assistant in a department of Japanese, and an English teacher at Anhui University in China. She is presently a doctoral student in education and a bilingual resource teacher for intermediate grades.

Raquel Gonzáles has been a bilingual kindergarten teacher for 5 years. She is presently finishing her M.A. in counselling and guidance.

Teachers as Learners

Once teachers entered households as learners—as researchers seeking to construct a template for understanding and tapping into the concrete life experiences of their students—the conventional model of home visits was turned on its head. No attempt would be made to teach the parents or to visit for disciplinary reasons. This shift constituted a radical departure from the household visits that had been carried out in other programs (Vélez-Ibáñez, Moll, González, & Amanti, 1992). The after-school labs were restructured to accommodate these shifts, and the ethnographic method emerged as the vehicle for teachers to engage in participant-observations, rather than in traditional household visits. Within the lab setting, ethnography surfaced as more than a technique. It became the filter through which the households were conceptualized as multi-dimensional and vibrant entities. This new perspective reflected a corresponding shift in teachers' theoretical paradigms. As Spindler and Spindler note, in teaching anthropology "a state of mind is more important than specific techniques" (1990, p. 108); or as Segal puts it, "The question is: How can we go about teaching an anthropological imagination?" (1990, p. 121).

Through the mediating structure of the after-school study groups, teachers were provided with the forum to engage in reflexive thought. Although specific techniques in participant-observation, field note writing, interviewing, and elicitation of life histories were presented, the focus was continuously on the joint construction of knowledge. Ethnographic fieldwork became not one lone researcher grappling with overwhelming data, but a collaborative and reflexive process in which teacher/researchers and university-based researchers shared insights and information. Reflexivity in

fieldwork, however, is not unproblematic. Indeed, one of the missions of the study groups became overcoming the paradox of gaining understanding without falling into the trap of inaction. In the face of sometimes overwhelming social and structural factors which face the students and their families, it would be easy simply to give in to a feeling of helplessness. One teacher (MFT) voiced this sentiment as she reflected on her initial pessimism: "I did not realize it at the time, but I used to believe that my students had limited opportunities in life. I thought that poverty was the root of many of their problems, and that this was something too big for me to change as a teacher." Through the reflexive discourse of the study groups, this hopelessness was dispelled. The teachers no longer felt isolated from each other or from the community, as this same teacher explained: "This fatalistic obsession of mine has slowly melted away as I have gotten to know my students and their families. I believe this transformation is the most important one I have made. Its ramifications have reached far beyond the classroom."

Teaching an "Anthropological Imagination": Teachers as Reflexive Practitioners

Initially, teachers had difficulty viewing their home visits as educational research. They had to struggle to shed their notion of educational research as having to be based on quantifiable variables that are meticulously controlled. Yet, a realization gradually emerged that reflexively oriented work needs to "begin with the understanding that systematic thinking about one's own experiences is a valid source of some knowledge and insight" (Segal, 1990, p. 122). A reliance on something other than empirical data and a shift to reflexive observation left the teachers feeling overwhelmed with the sheer complexity of the task.

Anna Rivera reported feeling "like a private investigator—like you're watching everything. What are they cooking? How do you make this, how do you do that? The home visit was totally different from what I had done before." The myriad of details, of participating and observing, of interviewing and audio recording and note taking, of being both teacher and ethnographer was, at the outset of the first interview, a numbing experience. This hesitance soon wore off as teachers became more and more comfortable with the process. Martha Floyd-Tenery reported after her series of interviews, "I remember at first I was scared to death. Would the family be skeptical? What would they think of me? Would they feel uncomfortable? I remember thinking all kinds of things. And now, it seems, like, what is the big deal? I can do this, and I can do it well."

When questioned about their own particular transformations, teachers overwhelmingly cited two influencing factors: (1) the orientation to the

households as containing funds of knowledge and (2) the reflexive process and study group meetings after the visits. Anna Rivera affirmed that "most of the change had come during the study groups. I heard something, or I said something during the study group." Teachers in the study group affirmed their theoretical development as an aftereffect of the actual practice of household visits. They reiterated that theory and practice are really two sides of a coin, and one without the other is limited.

The reflexive mode injected into the study groups noticeably altered the ways in which participants viewed their own participant-observation as it engendered an examination of their underlying beliefs and rationalizations. As other qualitative researchers have stated, "People who have never before articulated their beliefs and customs now are asked to do so and what may never before have been examined has now become verbally objectified, so that it is at least present for examination" (Ely, 1991, p. 197). One teacher commenting on the reflexive process stated: "That was the only time I had ever talked about how I was teaching and why I was teaching that way, and how that related to how I perceived children to learn. At all the other inservices or teacher meetings I had ever attended, I was talked at. I was fed information, and it was more technique—*how* to do something, not *why*." The study groups offered a safe, non-judgmental environment for thinking out loud about classroom practice as well as about household functions. Participants in the study groups were able to voice their changing ideas about households and about the subsequent transformation that the observations and reflection provoked.

Ethnographic Techniques

Throughout the study groups, anthropological inquiry was presented more as a state of mind than as a technique (Spindler & Spindler, 1990). However, the theoretical implications of technique became conspicuous in several ways, and an effort to systematize reflexivity emerged. As part of the ethnographic experience, teachers were asked to select two or three students from their classrooms to participate in the study, which would involve interviews with the students and their families. Students were selected at the teacher's discretion, and no formal attempt at representativeness was made. Teachers visited the households of the students they had selected three times. Each interview lasted an average of two hours. Teachers also conducted an interview with each target child. The students ranged from kindergarten through fifth grade. Teachers were asked to record the interviews, if the family was comfortable with that, and to conduct the interview as conversationally as possible. Teachers were paid as project participants for their extra duty time.

Following their forays into the field, teachers were asked to write field notes based on each interview. These field notes became the basis for the study group discussions. Teachers overwhelmingly remarked on the time-consuming nature of this process. After a hectic school day, taking the time to conduct interviews that often stretched into two or three hours, and to later invest several hours in writing field notes was an exacting price to pay for a connection to the households. They cited this one factor as precluding wholesale teacher participation in this project. Yet, in spite of the strain of the task, the teachers felt that the effort was worthwhile. Through the reflexive process involved in transcription, teachers gained elusive insights that might otherwise have been missed. As they replayed the audio tapes and referred to their notes, connections and hunches began to emerge. The households began to take on a multi-dimensional reality that had taken root in the interview and reached its fruition in reflexive writing. Writing gave form and substance to the connection forged between the household and the teacher.

A second ethnographic technique involved the writing of a personal field journal. Not all teachers opted to do this. One teacher who kept an extensive journal noted: "Transformation occurs over a long period of time and is quite subtle in its nature. Elements of my transformation would have been elusive had I not documented them along the way. I recognize this as I look back and cannot remember having those feelings/beliefs." Another teacher lamented the fact that she had not kept a journal. She relates, "I don't remember when I stopped feeling and thinking this way or that way. I don't think it was an overnight thing. I think all of that is just changing little by little. If I had kept a journal, I could go back and read and say, OK, this is where I first started thinking about it." These comments highlight the teachers' awareness of the documentation of the reflexive process beginning to take shape.

A third field technique involved questionnaires. Teachers felt that the use of questionnaires during their home visits signaled a shift in approaching the households as learners. Entering the household with questions rather than answers provided the context for an inquiry-based visit, and the teachers considered the questionnaires a meaningful resource. They addressed such diverse areas as family histories, networks, labor history, educational history, language use, and child-rearing ideologies. Within each topic, questions were left open-ended, and teachers probed and elicited information as the interviews proceeded. Interviews were, as teachers commented, more of a conversation than an interview, and one teacher noted that with the audiotaping of the interview, she was free to be a conversational partner without the task of furious note taking. Teachers used the questionnaire as a guide rather than a protocol, suggesting possible areas to explore and incorporating previous knowledge into formulating new questions. Interviews were not conducted as a unilateral extraction of information, as teachers were encouraged to make connections with their own lives and histories as they elicited narratives from the families.

These issues illustrate the critical effect that methodology had in learning a different way of visiting homes. Teachers often voiced the notion that "methodology helps to implant theory and represents its embodiment, particularly in this project, which is very experiential." The theoretical orientation to the households as containing funds of knowledge was critical in teacher transformation. But equally important in the transformative process was the reflection generated by the collaborative effort of a collective ethnographic experience.

Funds of Knowledge as Transformative Principle

Teachers voiced two underlying transformative potentials in viewing the households as repositories of funds of knowledge. The first concerns a shift in the definition of culture of the households, and the second concerns an alternative to the deficit model of households.

The first shift owes its genesis to the prevailing trends in anthropological literature away from an integrated, harmonious, univocal version of culture. It seemed to us that the prevailing notions of culture in the schools centered around observable and tangible surface markers such as dances, food, folklore, and the like. Viewing households within a processual view of culture, that is, a view of culture as process rather than as a normative end state, emphasized the lived contexts and practices of the students and their families. In this way, culture was constructed as a dynamic concept and not as a static and uniform grab bag of tamales, *quinceañeras*, and *cinco de mayo* celebrations (see González, 1992). Instead, teachers learned how households network in informal market exchanges. They learned how cross-border activities made mini-ethnographers of their students. And most importantly, they learned that students acquire a multi-dimensional depth and breadth from their participation in household life (Moll et al., 1992).

Cathy Amanti, a teacher who participated in a pilot phase of this project and who is now a graduate student in anthropology working on the project as a researcher, evokes what this realization signified for her as a teacher:

> The impact of participating in this project went far beyond my expectations. My approach to curriculum and my relationship with my students are two areas where the impact was most profound. In the area of curriculum, as a teacher of predominantly Mexican and U.S. Mexican students, I believed in the importance of acknowledging and including aspects of my students' culture in my classroom practice. However, though teachers are trained to build on students' prior knowledge, they are given no guidelines for how to go about eliciting this knowledge. Also, the multicultural curriculum available in schools perpetuates an outdated notion of culture as special and isolated ritual events and artifacts, the

kind featured in *National Geographic*. Its focus on holidays, "typical" foods and "traditional" artifacts covers a very narrow range of my students' experiences and ignores the reality of life in the borderlands, which often falls outside the norms of traditional Anglo or Mexican culture. Participating in this project helped me to reformulate my concept of culture from being very static to more practice-oriented. This broadened conceptualization turned out to be the key which helped me develop strategies to include the knowledge my students were bringing to school in my classroom practice. It was the kind of information elicited through the questionnaires that was the catalyst for this transformation. I sought information on literacy, parenting attitudes, family and residential history, and daily activities. But I was not looking for static categories, or judging the households' activities in these areas according to any standards—my own or otherwise. I simply elicited and described the context within which my students were being socialized. What this meant was that if the father of one of my students' did not have a "job" I did not stop the inquiry there. The format of the questionnaires encouraged me to continue probing to discover any type of activity that the father and mother were doing to ensure the survival of the household. If we were simply eliciting labor history associated with categories of work in the formal economic sector, we would risk both devaluing and missing many of the experiences of our students and their families. This has clear implications for how we approach culture. If our idea of culture is bound up with notions of authenticity and tradition, how much practice will we ignore as valueless and what will this say to our students? But if our idea of culture is expanded to include the ways we organize and make sense of all our experiences, we have many more resources to draw upon in the classroom. (González & Amanti, 1992, p. 8)

The second transformative effect of the funds of knowledge perspective deals with debunking the pervasive idea of working-class minority households as lacking worthwhile knowledge and experiences. Teachers were particularly concerned about reiterating this theme, as they felt that many educators continue to devalue the household knowledge of non-mainstream children. Households are often viewed as units from which the child must be rescued, rather than as repositories of knowledge that can foster the child's cognitive development. Teachers in our study found the knowledge base in households to be broad and diverse, encompassing a range of skills from agronomy to soil and irrigation systems, to trans-border marketing and ethnobotanical expertise. Any of the numerous funds of knowledge found within the households could form the basis for curriculum units in science, math, language arts, and other subjects.

Each teacher, as she came to know the households personally and emotionally, came away changed in some way. Some were struck by the

sheer survival of the household against seemingly overwhelming odds. Others were astonished at the sacrifices the households made in order to gain a better education for their children. They all found parents who were engineers, teachers, and small business owners in Mexico, who pulled up stakes and now work in jobs far below their capabilities in order to obtain a better life and education for their children. They found immigrant families with 15 people in a household, with all adult males and females working in order to pay for rent and everyday necessities. As Raquel Gonzáles notes, "I came away from the household visits changed in the way that I viewed the children. I became aware of the whole child, who had a life outside the classroom, and that I had to be sensitive to that. I feel that I was somewhat sensitive before the visits, but it doesn't compare to my outlook following the visits."

Closely related to this point, teachers voiced their concern that some educators approach the community they work in with an attitude of "How can they facilitate *my* job?" This places the entire burden on the community to reach out to the school. One teacher (MFT) states, in reference to such teachers:

> "It's never 'How can *I* do this?' They feel if parents don't show up for school events it means they don't care. But there could be many reasons why the parents can't come to these meetings such as conflicts with work, or not knowing the language."

This same teacher, however, recognizes that she still thinks and says many things that could be construed as emanating from a similar mindset. "You have to disprove what you've been taught," she affirms. Another teacher (AR) remarked on unlearning her previous training in household visits. "Can you imagine what kind of subtle message comes across when someone comes into your home to *teach* you something?"

The Teachers' Stories

What follows are three brief case study examples[1] based on the teachers' experiences in doing research in their own students' households.

AR: The Estrada Family

During the last year and a half I have visited the Estrada family for five formal interviews, two birthday parties, one *quinceañera* (an adolescent girl's debutante party), and several informal visits. I summarize here what I have learned about this family, and describe how I used that knowledge in my teaching, and reflect upon what changes I have undergone.

My first contact with the family occurred as I was preparing the classroom for the first day of school and I heard a knock at the door. In

walked a family who wanted to introduce themselves to their new school. Mr. and Mrs. Estrada wanted their third grade daughter to become acquainted with the school and her teacher, me. In Spanish, they shared that they believed education to be important and that they decided to visit their third grade and kindergarten daughters' classrooms in order to make the transition to a new school a positive experience. They had in tow a four-year-old son because they wanted him to know what was expected.

Through the home visits, I learned that the family was quite extensive. I met the middle-school-age son, two high-school-age daughters, a maternal grandfather, and a maternal uncle, all who lived in the same household. The trailer they lived in was located among fourteen other trailers in a recently developed trailer park.

The living room included a bookcase of reference books in Spanish. The father had been trained in Hermosillo, Sonora, Mexico as an electrical repairman. He worked on refrigerators, air conditioners and other appliances while in Hermosillo. In Tucson, he works for a local tortilla factory delivering tortillas to grocery stores.

The living room bookcase also included recipe books and craft books. The family had owned and operated a small convenience store in Hermosillo. Mrs. Estrada was in charge of managing the store including ordering, bookkeeping, and selling. The whole family participated in some fashion by stocking, cleaning and selling. In fact, they had named the store in honor of the third grade daughter.

They moved to Tucson because they wanted to improve the opportunities for their children. Mrs. Estrada had family in Tucson and had lived here for a while as a child. Mr. Estrada came in search of a job and living quarters and then made arrangements for his family to join him about six months later. The children left their schoolmates and moved here in 1988.

During my visits, I have observed each family member take responsibility. The three older children are assigned the care of a younger sibling. The two sisters in high school are each responsible for one of the two younger sisters while the brother in middle school is responsible for the youngest brother. The family is very resourceful. Everyone helps with the household chores, including producing tortillas for eating and for selling. The males are the ones in charge of maintenance and the father shares his tools with the sons.

During a birthday party, I observed that the family had choreographed their duties. The father and the son in middle school took care of the piñata, which meant that the son had to stand on the roof of a van to hold one end of the line while the other end was attached to the roof of the trailer. The daughters organized the children for the piñata breaking. Each family member served food and beverages.

What do these observations have to do with my teaching? Specifically, I used the family's knowledge about owning and managing a store to create

a math unit on money. For three weeks, we explored the social issues of money, along with mathematical concepts about money. Beyond that, I used the information I learned about the home in incidental matters that color the curriculum. I knew where my student lived and who her neighbors were. I made connections in class: "I want you to practice hitting a softball. I bet you can use that empty lot near your home to practice with your classmate who lives across the street"; and "How about if you work on your science project with your classmate who lives next door to you?"

The knowledge I gleaned also had an impact on the student. She knew I had been at her home to talk with her parents. She understood that her parents and I communicated. This influenced other students also. They recognized me in the trailer park. They came over to chat with me. They knew I knew where they lived and played.

What changes have I undergone? Fundamentally, I have redefined my conception of the term *home visit.* I was trained during my first years of teaching (some 15 years ago) that my goal during a home visit was to teach the parent. I had an agenda to cover. I was in control. Now I go to learn. I have some questions I want to explore. I might want to learn about some particular home activities like what the family does for recreation. However, these questions are open-ended. I start an interview and follow the conversation to wherever it might lead. I am an active listener. I am a listener who returns to pick up the conversation from the last visit.

Most significantly, I am becoming a listener who reflects. During the last year and a half I have made time to do the visits and have made time to reflect about what I have learned. I have firsthand knowledge that I have gained through my research with the families. I use this knowledge as background when I am reading about minority families in books or articles. I read an article and compare what it states to the knowledge gained from my work. I contrast and sometimes confirm, but more often challenge what I read.

I must admit that this whole process is a demanding one. I am choosing to place myself in situations where I have to listen, reflect, communicate, act and write. I believe I am learning, developing, and creating, and that is what makes this research worthwhile.

MFT: Reflecting on Change

As I re-read some of the early journal entries I made for this project, I realize how I have changed my views of the households. As I read these entries, I realize that I had discussed my students in terms of low academics, home life problems, alienation, and SES [socioeconomic status], and that I was oriented towards a deficit model. I no longer see the families I visited that way. Since I am looking for resources, I am finding resources, and I recognize the members of the families for who they are, and for their talents and unique personalities. We now have a reciprocal relationship where we exchange goods, services and information. I have also discarded many

myths prevalent in our region that I used to believe.

One example of such a myth is that Mexican immigrants have poor educational backgrounds. To the contrary, I discovered that some schools in Mexico were academically ahead of the U.S., and discipline was stricter. Instead of finding parents who do not emphasize education, I found parents who wanted *more* homework, more communication with the schools, and stricter discipline. All five families that I visited this year informed me that education was one of the reasons they came to the U.S. Another myth dispelled by the interviews is that of Mexicans having limited work experience. The parents of my five students had held the following occupations: grocery store owner, bank executive, carpenter, mechanic, dairyman, gravedigger, soldier, factory supervisor, farm worker, international salesman, mason, and domestic worker.

Strong family values and responsibility are characteristics of the families I visited. In every case, the household included extended family members. Fifteen family members lived in one house, including the student's grandmother, mother, two aunts, their husbands and children. My students were expected to participate in household chores such as cleaning house, car maintenance, food preparation, washing dishes, and caring for younger siblings. I learned what this insight meant when one of my students was unable to attend school drama and chorus rehearsals one day. In my journal entry detailing this project, I noted the following incident:

> Wednesday (11/25/92) The music teacher commented (to me), "You know, Leticia has missed two chorus rehearsals." Before I could answer, the school drama teacher stepped in to add, "Oh, she's very irresponsible." She had signed up to be in the Drama Club and had only been to two meetings. I said "Wait a minute...." The drama teacher corrected herself, and said, "Well, she's *acting* irresponsibly." I then told her how Leticia's younger brother was being hospitalized for a series of operations, and when the mother had to leave, she left Leticia in charge of caring for her two younger siblings. In fact, her missing after-school rehearsals was an act of responsibility, obedience and loyalty to her family.

I believe that this episode, and many other similar occurrences, help me to separate truths from myths by relying on what I have seen and heard from my students.

PR: The Ramírez Family

The reason I chose this family was basically because the mother was available during school hours so that I could visit during school time. When I was free, and my student teacher was available, I was able to walk over there and meet with her, so my criterion for choosing the family was more

for practical reasons than anything else. Once I got there, I really enjoyed sitting and talking to her. She was very eager to talk and very open about sharing her experiences, her family history, her impressions about what she has gone through. I felt it was as therapeutic for her, as it was informative for me. I believe that these are visits more than interviews. I didn't have a clipboard writing everything down. Once the tape recorder is on, it is easy for the interview to flow.

I found out during the interview that she had undergone radical changes in her life. She had been born in Nogales, Sonora, and came here as a married woman without very many rights. Apparently her husband was quite dictatorial, and whenever there was a decision to be made, he made it, and that was it. When her husband decided to go back to Mexico, she decided to stay—I think it was because she had a need to become her own person.

Another interesting characteristic that I noticed about her was that she treated her daughters more like her peers. She values their company and their ideas. When her older daughter was about ten, and their neighbor left town on vacation, she left Mrs. Ramírez in charge of her house and gave her the keys to the car, assuming that she knew how to drive. Mrs. Ramírez took this opportunity to teach herself how to drive. She saw many elderly women driving, and she thought to herself, "If they can do it, I can do it." She put all the girls in the car with her oldest daughter in front, and started to teach herself to drive. The daughters know how to read English, so she depended on them to help her read the signs, and to know where to go.

She also takes her daughters' ideas into consideration when they make a decision as a family, and she's very careful that they have the right kind of care. She was working for a while when her children were younger, but the woman who was caring for them was not doing an adequate job, and so Mrs. Ramírez had to quit her job. She did this even though it meant that she would have to go on food stamps and welfare. She felt that her daughters' care was more important than her having a job.

At the time of the home visits, she was looking for a job, but was not able to find one, and she thought it was because of her lack of English skills. She was looking around for some English classes to take nearby, and she would also go out every day, walking and looking for work that she could do. She had several requirements for her job: She didn't want to take care of children or to clean houses and she wanted something that was close by where she wouldn't have to drive too far. She was limiting herself to a certain extent, but she was being more exclusive in the kind of work that she could do because she felt that her job should be one where she could improve herself. She chose assembly types of work to apply for, and the last time I spoke to her, she had gotten a job at a lock assembly plant. Her youngest daughter is eight, so she feels that they are now able to be alone after school until she gets home at six.

She is on welfare at this point in her life, but definitely doesn't want to stay in that position. This is the reason why she was so discriminating about the kind of job that she wanted to do. She felt that if she did work like watching children, or cleaning houses, she would never be able to "better" herself. She feels that the job she has now is a step to something higher. I think that this is a common thing in many women's lives, where they are dependent on government aid, but they don't want it to be a permanent situation. She also commented that many women in her situation link up with a man just to have financial security, and she refused to do that, because she feels that it is not a good example to her children. Visiting her validated my respect for many Latin women. She is one of those people who knows what she wants, and is patient, trying to accomplish it. Sometimes people will say that the Latin culture dictates that you let fate, or providence dictate your actions, but I feel that she is an example of a person who takes the bull by the horns, and doesn't sit back and wait for things to happen.

The results of the home visits on my teaching practices were not immediately evident. I didn't feel I had really changed the curriculum in my classroom. It was not until I sat to reflect on what I had learned from the parents I interviewed that I realized how I had changed in the classroom as a result of my research.

It was very evident that my students had talents and aptitudes that were not readily evident to me in the everyday interaction in the classroom. Even though I use dialog journals to relate to my students on their daily activities, it was not until I went into their homes that I saw the potential and expertise that each child had to contribute to projects and studies that we did in the class.

For example, had I not visited Gilbert's home I would not have known about his ability to take things apart and repair them. In one of my visits his mom told me that he took apart one of the Nintendo remote controls that was not in working order and fixed it. I also found out that he used to sell bread after school with friends when his family owned a bakery in Mexico. I was then able to use this knowledge in our discussions with problem-solving conflicts, and when things needed repair, I knew I had a student who had knowledge of how things worked.

Through my visits with Graciela's family I learned about her talent for working with animals and how special she is with her pet parakeet. She is a very reserved child, but when she realized that I knew of her interests and talents, she became much more assertive and responded more actively with me and her peers.

Summary

These case studies illustrate the multi-dimensional facets of the students that teachers become aware of as they learn about the families' household networks, survival strategies, and resources. Even more importantly, however, the case studies can be read with an eye toward the theoretical development of teachers. Teachers were not given pre-digested methods to use unreflexively. Emerging from the teachers' own theoretical understanding of ethnography, home visits became participant-observation, and insights from the households were tied into broader regional, social, economic, and gender-related patterns. An anthropological imagination paved the way for teachers to probe beyond the surface issues of welfare, missed appointments, and overcrowded living conditions and to inspect the underlying constructions that rendered the surface structures meaningful and understandable. In addition, as teachers came to view their students as competent participants in households rich in cognitive resources, they came away with raised expectations of their students' abilities.

Problematic Areas

We have highlighted many of the affirmative and constructive aspects of our project. However, this is not to say the project has been without problems. Teachers have encountered a number of obstacles that impinge on the implementation of field research. The most often cited dilemma is, of course, lack of time. During a typical day, teachers are barraged on a number of fronts with demands on their time and energy. Adding to their already overloaded schedule, an effort to visit students' households, write field notes, and meet in study groups can be a high price to pay for making a connection to the home. Once the connection is made, other problematic situations can arise. Some households have felt the *confianza* between teacher and household grow to such an extent that the teacher has (although rarely) been placed in the role of confidante, furnishing advice and, at times, resources in times of crisis.

One of the more important connections to be made concerns the tapping of the household funds of knowledge for use within classroom pedagogy. Although all of the teachers are convinced that these funds exist in abundance, extracting their potential for teaching has proven to be an intricate process. Curriculum units based on the more conspicuous funds such as ethnobotanical knowledge of medicinal herbs and construction of buildings have emerged, but developing a tangible, systemic link to classroom practice has been more elusive (however, see Moll et al., 1990; Moll et al., 1992). The general consensus is that teachers are in need of time and

support to move from theory to practice, or from field research to practice. They strongly affirmed that the study groups provide an important way of maximizing time and combining resources and of conceptualizing the pedagogical connection between classrooms and households.

A final dilemma concerns the evaluation of the project. The assessment of the ethnographic process, the study groups, and the curriculum units cannot be carried out along conventional (experimental or quasi-experimental) lines. Transformation does not have a time frame. Qualitative evaluation methods have been most amenable to the methodology, and teachers were willing to document their own intellectual journeys through the use of personal journals, debriefing interviews, analysis of field notes, study group transcripts, and classroom observations. In sum, how to provide convincing evidence of positive change is a constant project issue.

Conclusion

At the end of a presentation in a local school district, one educator remarked cynically, "We don't need teachers to learn to be anthropologists. We need them to learn to teach." We suggest that the point is not whether teachers learn to become anthropologists or good ethnographers. The teachers themselves have made this very clear, as Patricia Rendón comments, "I don't want to be an anthropologist. I want to use whatever resources I can to become a better teacher." The issue is how to re-define the role of teachers as thinkers and practitioners. We have argued in this report that it begins by teachers themselves re-defining the resources available for thinking and teaching through the analysis of the funds of knowledge available in local households, in the students they teach, and in the colleagues with whom they work.

As the teachers' field research has evolved in such a way as to provide ownership of the process, they have been able to construct themselves as agents of change. In significant ways, these teachers have begun to refuse the role of technicians in their practice as educators. As Giroux (1985) has indicated, educators as transformative intellectuals can recognize their ability to critically transform the world. In a parallel fashion, as teachers have transcended the boundaries of the classroom walls, so have parents transcended the boundaries of the household. In a few but significant instances, parents have come to view themselves as agents capable of changing their child's educational experiences. As parents responded with personal narratives concerning their own unique and singular life course, a heightened historical consciousness began to emerge. Articulating the trajectory that brought parents to where they are facilitated an awareness of the historical character of their experiences. In this way, the notion of dialogue as an emancipatory educational process (Freire, 1981) was

injected into the households. As other researchers (Lather, 1986; Savage, 1988) have stated, ethnography can be seen as a tool for social action that can enable individuals to transform the confines of their circumstances. In the powerful dialogue that this ethnographic interview can engender, parents can and did find a passageway to the schools. As the teacher validates the households' experience as one from which rich resources or funds of knowledge can be extracted, parents themselves come to authenticate their skills as worthy of pedagogical notice. Most significantly, however, teachers have reported that parents have felt an increased access to the school. No longer is the institution viewed as an impenetrable fortress located on foreign soil. Rather, the teachers' incursion into previously uncharted domains has been reciprocated by the parents. Parents have felt the surge of *confianza* which has unlocked doors and overcome barriers.

Clearly, the project's payoffs are multi-faceted and complex. The emergence of teachers as qualitative researchers is one by-product. A second involves the increased access to the school felt by parents. A third is the changed relationship between teachers and the students whose households they visited. A fourth–and for our purposes significant–result is the emergence of curriculum units based on the household funds of knowledge. Teachers have been able to sift through the household resources and have found multiple elements that can be used as the bases for math, science, language arts, or integrated units. The classroom application is an evolving portion of the funds of knowledge inquiry. Teachers have invariably noted that each household contains an array of activities, strategies, and topics that can form the kernel of units that engage the students. For example, teachers using this methodology have formed mathematical units based on construction knowledge, ecology units based on ethnobotanical knowledge, a unit on sound and its properties based on music, and a comparative history of clothing, including topics such as inquiry into absorbency of fabrics, among other instructional activities. We have opted not to focus on this aspect in this report due to its multiple dimensions.

For teachers interested in developing a similar project in other locations, we propose the following minimal conditions based on our experiences, and as discussed in this report:

1. **Theoretical preparation.** It was the theoretical concept of funds of knowledge that provided a new perspective for the study of households as dynamic settings with abundant social and intellectual resources.

2. **Home visits as participant-observation.** The key is to enter the home in the role of learner, willing to interact and prepared to document what one learns, to produce new firsthand knowledge about the families and community.

3. **Study groups.** These meetings become the center for discussion, reflection, and analysis of the household visits and a catalyst for ideas about teaching.

4. **Voluntary participation.** All teachers agreed that participation in the project must remain voluntary, so that teachers have maximum control over the project, and the work does not become an undesirable imposition.

The teachers identified other aspects of the project as being important to its success, although not necessarily essential, such as the use of questionnaires to help guide the household interviews and observations, the collection and elaboration of field notes, and collaboration with anthropologists or other educational researchers. There was also consensus that the project must be re-invented at each site in relation to the social and historical conditions of the specific location.

We suggest that these minimal conditions can engender a dialogue of change and collaboration among teachers, parents, students, and researchers. The dialogue of the ethnographic interview can provide a foundation for the development of critical consciousness. The discourse that the interview sparks highlights the theoretical assertion that knowledge is not found, but constructed, and that it is constructed in and through discourse (Foucault, 1970, 1972). As the participants in this project become co-learners and co-constructors of knowledge, environments for a probing disposition of mind can be meaningfully and effectively created.

Notes

[1] The first two examples were authored by the teachers; the third one was narrated to Norma González. All household and family names have been changed to preserve anonymity.

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